

## WATER CONSERVATION

We must all do our part to use water wisely to ensure that we still have an adequate water supply for the future. Water conservation not only saves water, but also saves you money. Everyone can conserve water indoors and outdoors.

- Fix that leak
- Educate children to use water wisely
- Turn faucet off when brushing teeth
- Don't use toilet as a waste basket
- Take a 5 minute or less shower
- Replace appliances with high efficiency models
- Wash only full loads of clothes or dishes

- Follow water restriction days & water during the cool parts of the day
- Plant drought-resistant lawns & plants
- Put a layer of mulch around trees & plants to slow evaporation
- Use a broom not a hose to clean



# Annual Drinking Water Quality Report 2015



Customer Care & Cashiering Office  
City Hall - First Floor  
4970 City Hall Boulevard  
North Port, FL 34286  
(941) 429-7122

Service & Emergency Office  
6644 West Price Boulevard  
North Port, FL 34291  
(941) 240-8000

## ECO BAG DESIGN CONTEST WINNERS SAY "CHOOSE 2 REUSE"!



## Help Us GO GREEN!

Life gets busy so why not make receiving and paying your bill faster and more convenient while saving money and the environment. North Port Utilities offers many Go Green options.

### FREE 24/7 Go Green Billing Options:

- E-billing (Paperless Billing) - Fastest and most convenient way to receive your bill notification right to your email inbox

### FREE 24/7 Go Green Payment Options:

- Pay By Phone- 1-855-941-INFO(4636) - Visa, MC, & Discover
- Automatic Bank Draft- Makes paying your bill effortless and ensures your payment is never late
- Online Payments- Visa/MC/Discover, E-check, and Recurring Payments- all within your control

Visit [www.CityofNorthPort.com](http://www.CityofNorthPort.com) for more information.

Dear Customer,

We are once again pleased to present to you our annual water quality report. This report is designed to inform you about the quality water and services we deliver to you every day. Our constant goal is to provide you with a safe and dependable supply of drinking water. North Port Utilities wants you to understand the efforts we make to continually improve the water treatment process and protect our water resources. We are committed to ensuring the quality of your water.



## WATER EXPANSION PILOT PROJECT



North Port Utilities is happy to announce that expansion of City public water lines to areas off North Salford will be complete in 2016, at which time pilot project area residents will have the opportunity to voluntarily connect. This exciting project will bring a dependable supply of high-quality water, installation of fire hydrants to provide a fire-flow system, possible lower homeowner insurance premiums, and enhanced property values to residents that connect. The success of this project may give the City the opportunity to further expand water services to other areas of the City in the future.

Visit [CityofNorthPort.com](http://CityofNorthPort.com) for news and project updates

## OUR WATER TREATMENT PROCESS

The North Port Water Treatment Facility uses a combination of both reverse osmosis and conventional surface water treatment processes. The conventional surface water treatment and color removal process consists of taste and odor control, coagulation, flocculation, sedimentation, filtration, disinfection, and stabilization as primary water treatment techniques. The process used at the North Port plant to control taste and odor in the surface water plant is an absorption process. Powdered activated carbon (PAC) is added to the raw water prior to the flash mix chamber at the beginning of the treatment plant. Aluminum sulfate (ALUM), a commonly used coagulation chemical, is then added to the flash mixing chamber. The carbon particles, along with other particles, including color, bind with the alum and form heavy floc which is removed by sedimentation in a large basin. Conventional sand, anthracite coal, and gravel filtration is used to remove any remaining particles. Sodium hypochlorite (bleach) along with ammonia is used for disinfection after filtration. Sodium hydroxide (caustic) is used for stabilization (PH control).

North Port's water treatment facility also uses a reverse osmosis treatment process. The source water for this process is pumped from intermediate aquifer wells and into a series of membranes to remove salt and other inorganic materials from the water molecules. After purification, the water is run through an aeration odor control process to remove hydrogen sulfide. Chlorine is added as a disinfectant prior to blending with the treated surface water before distribution to our customers.

## WHERE OUR DRINKING WATER COMES FROM

The principle source of raw water supply for North Port's water treatment facility is the Myakkahatchee Creek, which originates in eastern Manatee County and flows adjacent to our water treatment facility along with six intermediate aquifer ground water wells. We are also able to draw water from the Cocoplum waterway as an alternative water source which is also treated at the North Port water treatment facility. The City of North Port also purchases treated surface water from the Peace River Manasota Regional Water Supply Authority which is treated at the Peace River water treatment facility located in Desoto County.

## Source Water Assessment

The origin of the Myakkahatchee Creek, known as the Big Slough watershed, is in a rural area with non-intensive industrial applications within its area. The State of Florida is presently conducting the Source Water Assessment of all public watersheds as required by Federal law. In 2004 the Department of Environmental Protection performed a Source Water Assessment on our system. The assessment was conducted to provide information about any potential sources of contamination in the vicinity of our surface water intakes. The surface water system is considered to be at high risk because of the many potential sources of contamination present in the assessment area. The assessment results are available on the FDEP Source Water Assessment and Protection Program website at [www.dep.state.fl.us/swapp](http://www.dep.state.fl.us/swapp) or they can be obtained from North Port Utilities, at (941) 240-8000.

The City of North Port routinely monitors for contaminants in your drinking water according to Federal and State laws, rules, and regulations. This report is based on the results of our monitoring for the period of January 1 to December 31, 2015.

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. EPA/CDC guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbiological contaminants are available from the Safe Drinking Water Hotline at 1-800-426-4791.

**All Drinking Water May Contain Contaminants**

In order to ensure that tap water is safe to drink, the EPA prescribes regulations, which limit the amount of certain contaminants in water provided by public water systems. The Food and Drug Administration (FDA) regulations establish limits for contaminants in bottled water, which must provide the same protection for public health.

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that the water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hotline at 1-800-426-4791.



**Substances that Could be in Water**

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity.

Contaminants that may be present in source water include:

- (A) Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
- (B) Inorganic contaminants, such as salts and metals, which can be naturally-occurring or result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.
- (C) Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses.
- (D) Organic chemical contaminants, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff, and septic systems.
- (E) Radioactive contaminants, which can be naturally occurring or be the result of oil and gas production and mining activities.

Results are from most recent tests performed in accordance with regulations per 141.153 (d) (3).

**NON-SECONDARY CONTAMINANTS TABLE**

**Microbiological Contaminants**

*Microbiological Contaminants:* Total Coliform. Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other potentially-harmful bacteria may be present. Coliforms were found in more samples than allowed and this was a warning of potential problems. Repeat samples were collected upstream and downstream with satisfactory results.

Contaminant and Unit of Measurement	Dates of sampling (mo./yr.)	MCL Violation Y/N	Highest Monthly Percentage/Number	MCLG	MCL	Likely Source of Contamination
1. Total Coliform Bacteria (positive samples)	N.P. 1/15-12/15	N	5%	0		Naturally present in the environment

The result in the lowest monthly percentage column is the lowest monthly percentage of samples reported in the Monthly Operating Report meeting the required turbidity limits.

Contaminant and Unit of Measurement	Dates of sampling (mo./yr.)	MCL Violation Y/N	Highest Single Measurement	Lowest Monthly Percentage of Samples Meeting Regulatory Limits	MCLG	MCL	Likely Source of Contamination
4. Turbidity (NTU)	N.P. 7/15 P.R. 8/15	N N	.28 .07	100% 100%	N/A	TT	Soil runoff

Results in the Level Detected column for radioactive contaminants, inorganic contaminants, synthetic organic contaminants, synthetic organic contaminants including pesticides and herbicides, and volatile organic contaminants are the highest average at any of the sampling points or the highest detected level at any sampling point, depending on the sampling frequency.

**Radioactive Contaminants**

Contaminant and Unit of Measurement	Dates of sampling (mo./yr.)	MCL Violation Y/N	Level Detected	Range of Results	MCLG	MCL	Likely Source of Contamination
6. Alpha emitters (pCi/L)	P.R. 2015	N	0.9-6.6	0.8-6.6	0	15	Erosion of natural deposits
7. Radium 226 + 228 or combined radium (pCi/L)	N.P. 2014 P.R. 2015	N N	0.5 0.2-1.0	0.2-1.0	0	5	Erosion of natural deposits

**Synthetic Organic Contaminants Including Pesticides and Herbicides**

The City of North Port water treatment facility does not add fluoride to finished water.

Contaminant and Unit of Measurement	Dates of sampling (mo./yr.)	MCL Violation Y/N	Level Detected	Range of Results	MCLG	MCL	Likely Source of Contamination
33. Dalapon (ppb)	N.P. 1/15 N.P. 4/15 N.P. 7/15 N.P. 10/15	N N N N	1.9	0-1.9	200	200	Runoff from herbicide used on rights of way.

**Inorganic Contaminants**

The City of North Port water treatment facility does not add fluoride to finished water.

Contaminant and Unit of Measurement	Dates of sampling (mo./yr.)	MCL Violation Y/N	Level Detected	Range of Results	MCLG	MCL	Likely Source of Contamination
11. Barium (ppm)	N.P. 9/15 P.R. 1/15	N N	0.005 0.010	0.005-0.010	2	2	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
16. Fluoride (ppm)	N.P. 9/15 P.R. 1/15	N N	0.061 0.225	0.061-0.225	4	4.0	Erosion of natural deposits; discharge from fertilizer and aluminum factories. Water additive which promotes strong teeth when at optimum levels between 0.7 and 1.3 ppm
20. Nitrate (as Nitrogen) (ppm)	N.P. 9/15 P.R. 1/15	N N	0.0 0.204	0.0-0.204	10	10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
22. Nitrite (as Nitrogen) (ppm)	N.P. 9/15	N	0.041	0.041	1	1	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits.
23. Sodium (ppm)	N.P. 9/15 P.R. 1/15	N N	62.3 43.1	43.1-62.3	N/A	160	Salt water intrusion, leaching from soil

**Stage 1 Disinfectants and Disinfection By-Products**

For bromate, chloramines, or chlorine, the level detected is the the highest running annual average (RAA), computed quarterly, of monthly averages of all samples collected. For haloacetic acids or TTHM, the level detected is the highest RAA, computed quarterly, of quarterly averages of all samples collected if the system is monitoring quarterly or is the average of all samples taken during the year if the system monitors less frequently than quarterly. Range of Results is the range of individual sample results (lowest to highest) for all monitoring locations, including Initial Distribution System Evaluation (IDSE) results as well as Stage 1 compliance results.

Disinfectant or Contaminant and Unit of Measurement	Dates of sampling (mo./yr.)	MCL or MRDL Violation Y/N	Level Detected	Range of Results	MCLG MRDLG	MCL or MRDL	Likely Source of Contamination
77. Chloramines (ppm)	1/15-12/15	N	2.49	0.6-4.9	MRDLG = 4	MRDL = 4.0	Water additive used to control microbes
79. Haloacetic Acids (five) (HAA5) (ppb)	1/15-12/15	N	31.14	20.2-48.2	NA	MCL = 60	By-product of drinking water disinfection
80. TTHM [Total trihalomethanes] (ppb)	1/15-12/15	N	37.49	22.3-81.6	NA	MCL = 80	By-product of drinking water disinfection

The monthly TOC removal ratio is the ratio between the actual TOC removal and the required TOC removal.

Contaminant and Unit of Measurement	Dates of sampling (mo/yr)	TT Violation Y/N	Lowest Running Annual Average, Computed Quarterly, of Monthly Removal Ratios	Range of Monthly Removal Ratios	MCLG	MCL	Likely Source of Contamination
83. Total organic carbon	N.P. 2015 P.R. 2015	N N	1.95 1.60	1.6-2.23 1.42-1.76	N/A	TT	Naturally present in the environment

**Lead and Copper (Tap Water)**

Contaminant and Unit of Measurement	Dates of sampling (mo./yr.)	AL Exceeded (Y/N)	90th Percentile Result	No. of sampling sites exceeding the AL	MCLG	AL (Action Level)	Likely Source of Contamination
84. Copper (tap water) (ppm)	N.P. 01/14	N	.333	0	1.3	1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives

**Definitions**  
In the table to the left, you may find unfamiliar terms and abbreviations. To help you better understand these terms we've provided the following definitions:

**Maximum Contaminant Level or MCL:** The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.

**Maximum Contaminant Level Goal or MCLG:** The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.

**Action Level (AL):** The concentration of a contaminant that, if exceeded, triggers treatment or other requirements that a water system must follow.

**Initial Distribution System Evaluation (IDSE):** An important part of the Stage 2 Disinfection Byproducts Rule (DBPR). The IDSE is a one-time study conducted by water systems to identify distribution system locations with high concentrations of trihalomethanes (THMs) and haloacetic acids (HAAs). Water systems will use results from the IDSE, in conjunction with their Stage 1 DBPR compliance monitoring data, to select compliance monitoring locations for the Stage 2 DBPR.

**Treatment Technique (TT):** A required process intended to reduce the level of a contaminant in drinking water.

**Maximum residual disinfectant level or MRDL:** The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

**Maximum residual disinfectant level goal or MRDLG:** The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.

“ND” means not detected and indicates that the substance was not found by laboratory analysis.

**Parts per million (ppm) or Milligrams per liter (mg/l) :** One part by weight of analyte to 1 million parts by weight of the water sample.

**Parts per billion (ppb) or Micrograms per liter (µg/l):** One part by weight of analyte to 1 billion parts by weight of the water sample.

**Picocurie per liter (pCi/L):** Measure of the radioactivity in water.

**Nephelometric Turbidity Unit (NTU):** Measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person.

**Lead and Drinking Water**

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. North Port Utilities is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline at 1-800-426-4791 or online at <http://www.epa.gov/safewater/lead>.



If you have any questions about this report, please contact North Port Utilities, at (941) 240-8000. We encourage our valued customers to be informed about their water. If you want to learn more, please attend any of our regularly scheduled City Commission meetings that are held biweekly at North Port City Hall, located at 4970 City Hall Boulevard.



## Unregulated Contaminant Monitoring Results Table

The City of North Port Utilities has been monitoring for unregulated contaminants (UCs) as part of a study to help the U.S. Environmental Protection Agency (EPA) determine the occurrence in drinking water of UCs and whether or not these contaminants need to be regulated. At present, no health standards (for example, maximum contaminant levels) have been established for UCs. However, we are required to publish the analytical results of our UC monitoring in our annual water quality report. If you would like more information on the EPA's Unregulated Contaminants Monitoring Rule, please call the Safe Drinking Water Hotline at (800) 426-4791.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V
1	PWSID	PWS Name	Size	Facility ID	Facility Name	Facility Water Type	Sample Point ID	Sample Point Name	Sample Point Type	Associated Facility ID	Associated Sample Point ID	Collection Date	Sample ID	Contaminant	MRL	Method ID	Analytical Results Sign	Analytical Results Value	Sample Event Code	Monitoring Requirement	Region	State
2	FL6580651	North Port Utilities	L	1	North Port WTP	SW	651001	North Port WTP	EP	2	651002	3/31/2014	35132585001AM	Halon 1011	0.06	EPA 524.3	<		SE4	AM	4	FL
3	FL6580651	North Port Utilities	L	1	North Port WTP	SW	651001	North Port WTP	EP	2	651002	3/31/2014	35132585001AM	PFBS	0.09	EPA 537	<		SE4	AM	4	FL
4	FL6580651	North Port Utilities	L	1	North Port WTP	SW	651001	North Port WTP	EP	2	651002	3/31/2014	35132585001AM	chromium	0.2	EPA 200.8	<		SE4	AM	4	FL
5	FL6580651	North Port Utilities	L	1	North Port WTP	SW	651001	North Port WTP	EP	2	651002	3/31/2014	35132585001AM	1,4-dioxane	0.07	EPA 522	<		SE4	AM	4	FL
6	FL6580651	North Port Utilities	L	1	North Port WTP	SW	651001	North Port WTP	EP	2	651002	3/31/2014	35132585001AM	1,3-butadiene	0.1	EPA 524.3	<		SE4	AM	4	FL
7	FL6580651	North Port Utilities	L	1	North Port WTP	SW	651001	North Port WTP	EP	2	651002	3/31/2014	35132585001AM	HCFC-22	0.08	EPA 524.3	<		SE4	AM	4	FL
8	FL6580651	North Port Utilities	L	1	North Port WTP	SW	651001	North Port WTP	EP	2	651002	3/31/2014	35132585001AM	PFHpA	0.01	EPA 537	<		SE4	AM	4	FL
9	FL6580651	North Port Utilities	L	1	North Port WTP	SW	651001	North Port WTP	EP	2	651002	3/31/2014	35132585001AM	PFHxS	0.03	EPA 537	<		SE4	AM	4	FL
10	FL6580651	North Port Utilities	L	1	North Port WTP	SW	651001	North Port WTP	EP	2	651002	3/31/2014	35132585001AM	PFNA	0.02	EPA 537	<		SE4	AM	4	FL
11	FL6580651	North Port Utilities	L	1	North Port WTP	SW	651001	North Port WTP	EP	2	651002	3/31/2014	35132585001AM	PFOS	0.04	EPA 537	<		SE4	AM	4	FL
12	FL6580651	North Port Utilities	L	1	North Port WTP	SW	651001	North Port WTP	EP	2	651002	3/31/2014	35132585001AM	PFOA	0.02	EPA 537	<		SE4	AM	4	FL
13	FL6580651	North Port Utilities	L	1	North Port WTP	SW	651001	North Port WTP	EP	2	651002	3/31/2014	35132585001AM	cobalt	1	EPA 200.8	<		SE4	AM	4	FL
14	FL6580651	North Port Utilities	L	1	North Port WTP	SW	651001	North Port WTP	EP	2	651002	3/31/2014	35132585001AM	1,1-dichloroethane	0.03	EPA 524.3	<		SE4	AM	4	FL
15	FL6580651	North Port Utilities	L	1	North Port WTP	SW	651001	North Port WTP	EP	2	651002	3/31/2014	35132585001AM	strontium	0.3	EPA 200.8	=	685	SE4	AM	4	FL
16	FL6580651	North Port Utilities	L	1	North Port WTP	SW	651001	North Port WTP	EP	2	651002	3/31/2014	35132585001AM	chromium-6	0.03	EPA 218.7	<		SE4	AM	4	FL
17	FL6580651	North Port Utilities	L	1	North Port WTP	SW	651001	North Port WTP	EP	2	651002	3/31/2014	35132585001AM	vanadium	0.2	EPA 200.8	<		SE4	AM	4	FL
18	FL6580651	North Port Utilities	L	1	North Port WTP	SW	651001	North Port WTP	EP	2	651002	3/31/2014	35132585001AM	1,2,3-trichloropropane	0.03	EPA 524.3	<		SE4	AM	4	FL
19	FL6580651	North Port Utilities	L	1	North Port WTP	SW	651001	North Port WTP	EP	2	651002	3/31/2014	35132585001AM	molybdenum	1	EPA 200.8	<		SE4	AM	4	FL
20	FL6580651	North Port Utilities	L	1	North Port WTP	SW	651001	North Port WTP	EP	2	651002	3/31/2014	35132585001AM	chloromethane	0.2	EPA 524.3	<		SE4	AM	4	FL
21	FL6580651	North Port Utilities	L	1	North Port WTP	SW	651001	North Port WTP	EP	2	651002	3/31/2014	35132585001AM	bromomethane	0.2	EPA 524.3	<		SE4	AM	4	FL
22	FL6580651	North Port Utilities	L	2	Distribution System	SW	651002	Riley Chase Apt.	MR			3/31/2014	35132585003AM	chromium-6	0.03	EPA 218.7	<		SE4	AM	4	FL
23	FL6580651	North Port Utilities	L	2	Distribution System	SW	651002	Riley Chase Apt.	MR			3/31/2014	35132585003AM	chlorate	20	EPA 300.1	=	335	SE4	AM	4	FL
24	FL6580651	North Port Utilities	L	2	Distribution System	SW	651002	Riley Chase Apt.	MR			3/31/2014	35132585003AM	chromium	0.2	EPA 200.8	<		SE4	AM	4	FL
25	FL6580651	North Port Utilities	L	2	Distribution System	SW	651002	Riley Chase Apt.	MR			3/31/2014	35132585003AM	cobalt	1	EPA 200.8	<		SE4	AM	4	FL
26	FL6580651	North Port Utilities	L	2	Distribution System	SW	651002	Riley Chase Apt.	MR			3/31/2014	35132585003AM	vanadium	0.2	EPA 200.8	=	0.84	SE4	AM	4	FL
27	FL6580651	North Port Utilities	L	2	Distribution System	SW	651002	Riley Chase Apt.	MR			3/31/2014	35132585003AM	molybdenum	1	EPA 200.8	=	3.4	SE4	AM	4	FL
28	FL6580651	North Port Utilities	L	2	Distribution System	SW	651002	Riley Chase Apt.	MR			3/31/2014	35132585003AM	strontium	0.3	EPA 200.8	=	1390	SE4	AM	4	FL
29	FL6580651	North Port Utilities	L	1	North Port WTP	SW	651001	North Port WTP	EP	2	651002	3/31/2014	14041529-001	chlorate	20	EPA 300.1	=	530	SE4	AM	4	FL